United States Department of Agriculture

Office of International Cooperation and Development

Fiscal Year 1993
Annual Report
May 1994

Effective October 1, 1993, the functions of the Office of International Cooperation and Development (OICD) were to be merged with those of the Foreign Agricultural Service. It is anticipated that this will result in little programmatic change, and that the program units of OICD will be maintained as one operating entity within the combined agency.

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I. INTRODUCTION

What is OICD's mission?

The Office of International Cooperation and Development has a twofold mission:

* To help United States Department of Agriculture (USDA) agencies, U.S. universities, and others enhance U.S. agriculture's global competitiveness.

* To help increase income and food availability in developing nations by mobilizing expertise for agriculturally led economic growth.

Enhancing Global Competitiveness

OICD programs enhance U.S. agriculture's competitiveness by providing linkages to world resources. These linkages often produce new technologies that can be vital to improving our current agricultural base, and developing new and alternative products and markets.

All major U. S. agricultural crops, representing 90 percent of the domestic crop value, originated outside the United States. To be truly competitive, the U.S. agricultural community needs access to the genetic diversity that still remains in those original locales.

There was a time when the United States was supreme in agricultural technology, but that is less true today. Much can be gained by seeking out and importing new technology from international research centers and universities.

OICD helps scientists from the U.S. Department of Agriculture, the university community, and others to establish relationships that foster the free flow of ideas and materials internationally.

The agency also conducts programs which facilitate trade linkages and promote investment overseas.

Providing U.S. Expertise Overseas

OICD serves as a link between the technical expertise of the U.S. agricultural community and other nations, especially in the developing world. By sharing U.S. agricultural knowledge with less developed nations, the United States provides the tools to help build stable economies and a more prosperous world. In the process, less developed nations surmount the barriers of hunger and poverty; and they develop a knowledge of and positive

identification with U.S. institutions, products, and services.

When agricultural production and incomes increase, people's diets and nutrition improve. Rising incomes also permit them to increase their imports to help meet demands for more and different foods. History has demonstrated that nations moving from low- to middle-income status have become the largest growth markets for U.S. agricultural exports.

> *Economic development is a continuum: the least developed graduate from grant aid to concessional aid, and ultimately take their place as full partners in the marketplace. Thus, OICD -- helping countries to advance along the continuum and strengthening the U.S. agricultural economy -- supports the broader mission of USDA.*

How does OICD accomplish its mission?

The agency pursues a number of program objectives to fulfill its twofold mission:

- Support the private sector and other public and private institutions in areas where they can best play a major role;
- Facilitate trade and investment interests of the U.S. agribusiness sector;
- Establish systems that allow U.S. agriculture's continuing access to technology, genetic material, and other unique resources worldwide;
- Establish systems that encourage U.S. agricultural scientists and institutions to be involved in global programs that are on the cutting edge of technology and of economic and policy debate;
- Mobilize expertise to help other countries move toward strong market and trade-oriented economies, through development efforts in food and agricultural systems that increase incomes among the poor majority; expand the availability and consumption of food; and maintain and enhance the natural resource base;
- Help other Federal agencies carry out their global missions by tapping USDA and other institutional expertise and resources; and
- Serve the interests of U.S. agriculture and citizenry through international organizations related to food and agriculture.

II. OVERVIEW OF THE AGENCY

How is OICD organized?

To carry out its program objectives, OICD is organized into four major program divisions (Appendix A) which report directly to the Administrator of the agency:

* The Food Industries Division promotes a vital, healthy private sector in the United States and abroad. The division organizes marketing workshops and provides information services, in-country technical team visits, and missions that link U.S. and foreign entrepreneurs to expand business opportunities. The division also arranges career-related training for foreign agriculturalists, such as:

  - o The Cochran Fellowship Program for professionals from middle-income countries and emerging democracies to foster mutual trade and development interests; and

  - o Academic and non-degree training sponsored by other USDA agencies as well as other governments and international organizations.

* The Research and Scientific Exchanges Division (RSED) seeks new knowledge and technology beneficial to the United States and cooperating countries through collaborative research and scientific exchanges on a broad range of subjects in agriculture and forestry. Short-term visits between U.S. and foreign scientists are supported to acquire scientific or agroeconomic data, special research techniques, unique resources such as germ plasm or biological control organisms not available in the United States, and to conduct field work on significant problems facing U.S. agriculture. Through long-term projects, the division supports collaboration between U.S. researchers and their international counterparts on high-priority problems. Some of the research is carried out by investigators in foreign laboratories. Other projects are conducted jointly by scientists in the United States and cooperating laboratories overseas. Research often is conducted at much lower cost than is possible in the United States.

* The Development Resources Division is responsible for planning, managing, and coordinating USDA technical assistance and training programs to assist in the development of agronomically, institutionally, and economically sustainable agricultural systems in low- and middle-income countries. These programs help developing countries to improve the quality of life of their population, raise income levels, and speed development, while at the same time expanding commercial

markets for U.S. farm and forest products and ensuring the security of world food supplies.

The division seeks to accomplish its mission through:

- o Transfer of agricultural technology and technical information and management skills of USDA;
- o Contribution toward the development and maintenance of a sustainable global agricultural system which assures adequate food and fiber for the world's population; and
- o Encouragement of durable trade relationships.

The division is organized in two geographical branches that deal with bilateral and regional programs, and in three other units that address technical assistance and training needs in natural resources and the environment, management and technical courses, and technical information. The division coordinates the bulk of the Department's technical assistance program, utilizing OICD technical staff and recruiting short- and long-term technical advisors on agricultural specialties, primarily from USDA technical agencies and also from the U.S. land-grant university system.

* The International Organizations Division advances and protects U.S. agricultural interests by keeping U.S. policy views before the international community. The division manages USDA's role in such organizations as the Food and Agriculture Organization of the United Nations, the Organization for Economic Cooperation and Development, the World Food Council, and the Inter-American Institute for Cooperation in Agriculture.

In addition to the program divisions, the agency has an External Affairs Staff attached for administrative purposes to the International Organizations Division, which is responsible for the interagency and inter-governmental liaison functions, and public and technical information.

Finally, Administration provides all support services needed by the agency, including personnel, information resources management, budget, and travel.

How is OICD staffed?

OICD is an organization of approximately 210 people (Appendix B), of whom about 115 are permanent staff. The remainder hold various kinds of non-permanent positions related to specific fixed-term contracts which the agency manages. Almost all OICD staff are located at the headquarters in the Washington, D.C. area. At the

end of fiscal year 1993, five were stationed overseas on long-term assignments, primarily with the U.S. Agency for International Development (A.I.D).

Given the diverse programs of the agency, OICD boasts a similarly diverse work force reflecting an array of social and practical scientific skills, administrative expertise, and language ability.

How is OICD financed?

In fiscal 1993, OICD had an operating budget of $48 million (Appendix B). Only $7 million of that amount came from funds appropriated to OICD by the Congress. The appropriated funds serve primarily to operate the agency's research and scientific exchange programs, international organization liaison function, and the Cochran Middle-Income Fellowship Program.

The largest part of the agency's budget--about $37 million--comes from other Federal agencies, international organizations, and universities for reimbursable technical assistance, research, and training which OICD manages. Roughly 75 percent of these funds came from A.I.D.

An additional $3 million was expended in fiscal 1993 for development assistance activities managed by OICD on behalf of other countries and international organizations. These activities include technical assistance, training, and research.

The Congress also gave OICD authority in 1993 to spend the equivalent of $1 million from foreign currencies available to the United States for collaborative research projects overseas.

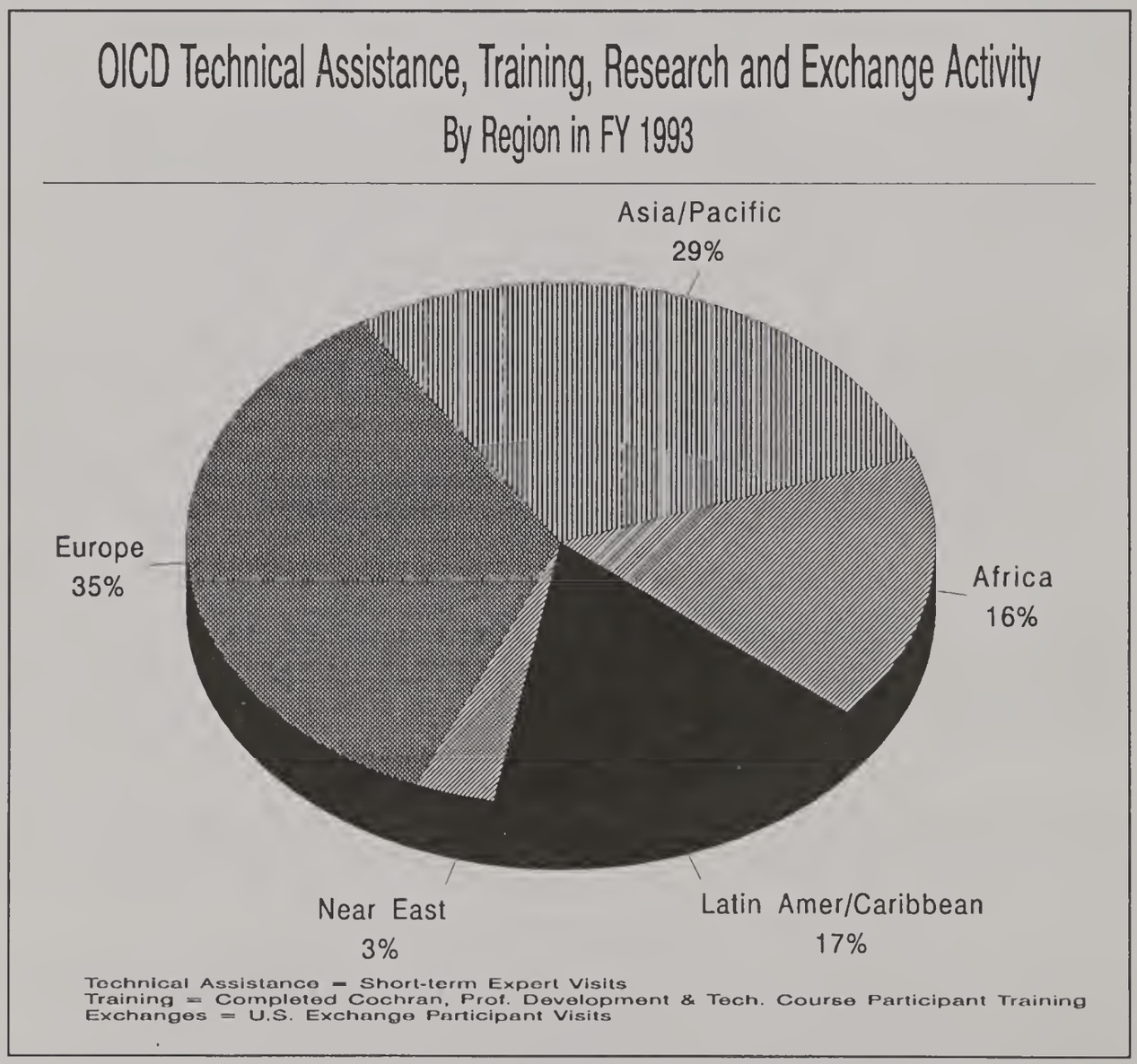
Of the $48 million available in fiscal 93, 26 percent was for salaries and benefits, 52 percent was for contracts and cooperative agreements, 9 percent was for per diem payments to program participants, 9 percent was for travel, and 4 percent was for communications, printing, supplies, and other services.

III. PROGRAM ACTIVITIES IN FY 1993

Agency Overview

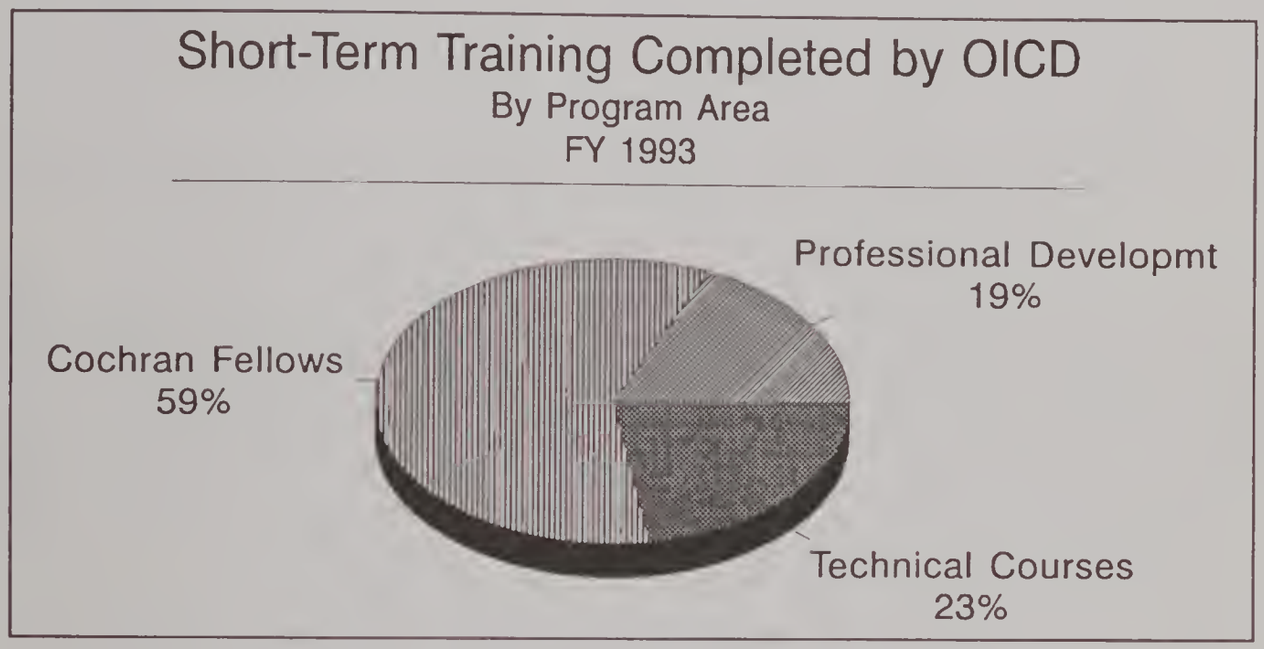
Because of expanded effort by OICD in support of the Administration's emphasis on the newly independent states of the former Soviet Union, Europe now represents the region of heaviest programmatic activity. The Asia region ranks second, with roughly equal activity carried out in Africa and the Americas.

The following pie chart indicates the relative balance of programmatic activity between regions of the world in fiscal 1993.



Short-term Training

OICD manages several programs with different operating modalities which provide short-term training to foreign nationals. They are: Cochran Fellowship Program; (2) Professional Development Program; and (3) Technical Course Program. Each program is described in detail below. The following chart shows the relative magnitude of these programs in fiscal 1993.



Trade and Investment

One of OICD's key links with the U.S. and foreign private sectors is through the Trade and Investment Program (TIP). 1993 was a year of continuing program diversification and growth in both content and geographical breadth. TIP continued to organize agribusiness opportunity missions, conduct agricultural marketing workshops, and provide information and outreach through the Agribusiness Information Center and the hosting of U.S and foreign agribusiness-related visitors to Washington, D.C. Geographically, TIP activities involved Caribbean, Central and South American, Central European, Sub-Saharan African, Asian, and Near East countries.

The Agribusiness Information Center (AIC) played a significant role in TIP's domestic and international agribusiness outreach strategy, responding to numerous inquiries, organizing a Washington-area Caribbean/Latin American agribusiness networking and speaker series, and staffing exhibits at internationally oriented

agricultural industry conferences and trade shows. The AIC's role in collecting and disseminating agribusiness data was enhanced in 1993, particularly through expanding its agribusiness information sources on Africa and Europe. During 1993, the AIC was a focal point for arranging agribusiness orientation programs and internships for agricultural sector representatives, especially from sub-Saharan Africa and Jamaica.

Agribusiness opportunity missions to Belize, Hungary, and Poland were organized and carried out in 1993. Six to fourteen U.S. agribusiness representatives met with foreign counterparts matched prior to departure, resulting in three or four business arrangements per mission. U.S. companies were helped to develop opportunities to sell U.S. food, breeding materials, and food processing equipment, and to develop profitable arrangements for importing tropical food and wood products. A complete list of business workshops and missions is contained in Appendix C.

In fiscal 1993, USDA's Foreign Agricultural Service (FAS), the U.S. Agency for International Development, and host governments financed seven agricultural marketing seminars which were conducted by TIP staff in Bulgaria, the Czech and Slovak Republics, Poland, Jamaica, Venezuela, and the Asian region. TIP workshops included small agribusiness exhibits which promoted sales of U.S. agricultural products and services. In addition, TIP staff advised a new, grass roots development organization which is organizing a business conference to promote U.S.-Bahamas business linkages.

TIP organized the high value food sector assessment team to El Salvador which was funded under the Emerging Democracies program. The team identified opportunities for U.S. grocery exports to that expanding market, and made recommendations on strengthening the food marketing system in El Salvador.

Through TIP's reimbursable arrangement with A.I.D.'s Africa Bureau, U.S. agribusiness companies increased access to sub-Saharan agribusiness opportunities. For example, a U.S. spice company developed further ties with Uganda, and U.S. essential oils companies strengthened trade ties with Guinea and established a joint venture in Burundi. TIP staff organized an opportunity for U.S. agricultural companies to meet business representatives from Zimbabwe, Guinea, and Burundi at a U.S. agricultural industry trade exposition, resulting in preliminary plans for establishment of a U.S. seed distributorship in Guinea. A seminar on public-private collaboration on agricultural research was organized by TIP staff in conjunction with the annual meeting of the Agricultural Research Institute.

This seminar provided U.S. and African research leaders and agribusiness managers the opportunity to increase research and business ties. TIP also organized a seminar to familiarize African embassy representatives with OICD's international cooperation and

development activities in that region. TIP continues to follow up with African embassies in responding to their information requests and calling on staff.

A new agreement with the A.I.D. Near East Bureau facilitated an Economic Research Service study of the potential market and potential pitfalls of promoting Near East perishable agricultural product exports to Europe. The study not only identified Near East country opportunities, but alerted A.I.D. to avoid promoting products where U.S. producers enjoy a comparative advantage. Results of the study also will be beneficial to U.S. perishable producers. TIP staff provided agribusiness support to A.I.D.'s Morocco Mission by recruiting experts to train food quality laboratory staff and strengthen agricultural market news capabilities, including updating data processing and dissemination technology.

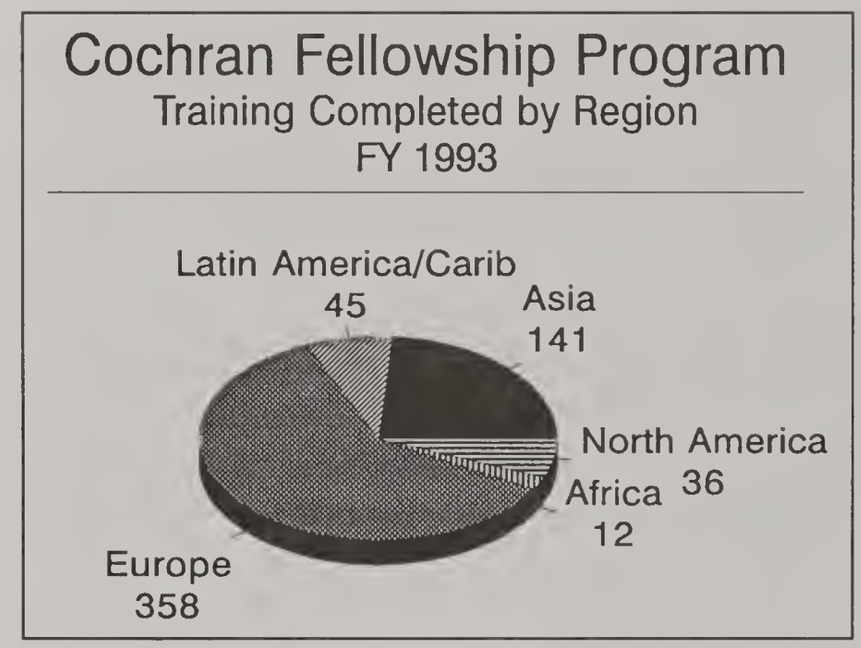
New agreements with A.I.D.'s Asia Bureau were designed to support the Regional Agribusiness Project (RAP). This provided the opportunity to introduce agricultural product quality workshops to that region. Representatives from 10 countries participated in the May 1993 workshop in Manila. Potential follow-up activities are being planned for advising the Government of Indonesia on modernizing its food safety and quality regulatory system and organizing a regional plant health and quarantine workshop.

A new agreement with A.I.D.'s Mission in Jamaica includes presenting two post-harvest workshops, one carried out in September 1993 on tropical orchard fruit, and one on root crops; providing technical assistance from the Food and Drug Administration related to processed ackee (a tropical fruit); and facilitating participation of new Jamaican entrepreneurs in various marketing-related study tours. For instance, one Jamaican will take part in USDA's hands-on seminar on grades and standards inspection of fresh fruits and vegetables, while others will participate in food industry trade expositions and conferences.

Cochran Fellowship Program

Since Congress first initiated the Cochran Middle-Income Fellowship Program in 1984, training in the United States has been arranged for more than 2,885 senior- and mid-level specialists, managers, technicians, agribusiness staff, and policy officials from 36 middle-income countries and emerging democracies. The training is intended to help these countries develop the agricultural systems necessary to meet their food needs, and to enhance their linkages with agricultural interests in the United States.

In fiscal 1993, 592 Cochran fellows from 33 countries completed training in the United States (Appendix D). In 1993, the program expanded into 11 countries of the Newly Independent States (NIS) of the former Soviet Union. Fellows came from both the public and



private sectors of their countries, and participated in training programs arranged by OICD with U.S. universities, USDA offices, and the private agribusiness sector. The subject matter ranged from phytosanitary and food safety controls to livestock genetics, agribusiness management, grain marketing, agricultural policy and trade.

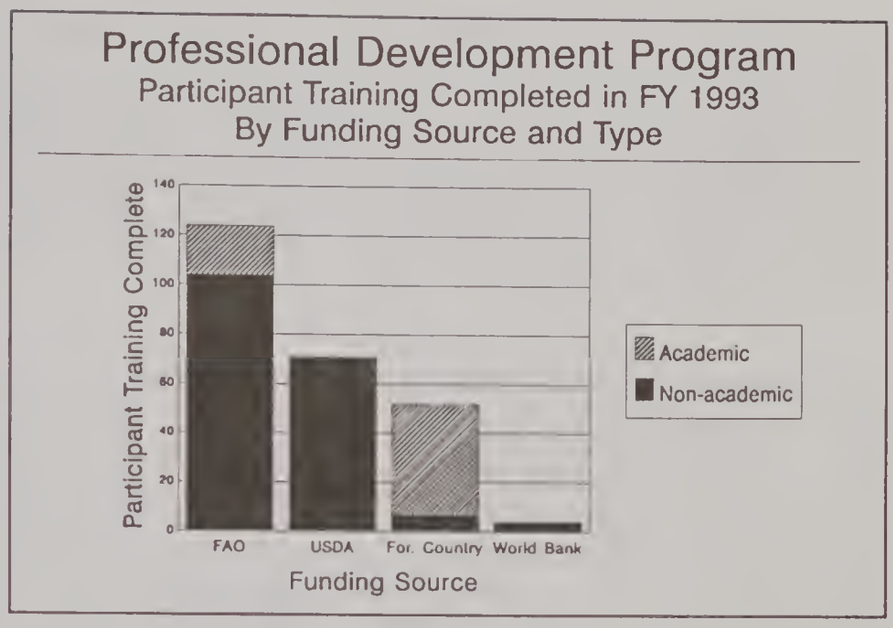
The Cochran Program is a unique example of public/private sector collaboration in support of international development objectives. It enhances U.S. trade and market development activities, promotes development of human and technical resources in the participating countries, provides contacts that lead to future technical and market development projects, and promotes goodwill between the United States and the participating countries.

Professional Development

For more than 40 years, since the days of the Marshall Plan, OICD and its predecessor organizations have been involved in the planning, development, and coordination of training programs for international visitors.

The Professional Development Program (PDP) designs and manages a wide array of training and education programs for international participants in agriculture, agribusiness, rural development, and related fields. In collaboration with other USDA agencies, the land-grant university system, private sector firms and training institutions, PDP offers quality programs and the requisite support services that meet the needs of both the developing and more advanced countries. Staff members also work closely with the Economic Research Service (ERS), the National Agricultural Statistics Service (NASS), the Soil Conservation Service (SCS), and other USDA agencies to provide logistical services in support of individuals and groups of trainees from Eastern Europe and the Newly Independent States (NIS) coming to the United States for short-term specialized training.

During fiscal 93, PDP unit worked with 265 participants from



Central and South America, Eastern Europe, the Newly Independent States, Africa, the Middle East, and Asia. Of this total, 186 non-academic programs were completed during the fiscal year (Appendix E). Programs ranged from placement of an Ethiopian for a masters degree in agricultural economics at Oklahoma State University to a two-week special workshop for 11 Nicaraguans on cattle genetics and reproduction.

Sponsoring organizations included the Food and Agriculture Organization (FAO) of the United Nations, the World Bank, the Bangladesh Agricultural Research Council, the Venezuelan Agricultural Research Fund, the Saudi Arabian Agricultural and Water (AGWAT) Project, other country governments, and FAS Emerging Democracies program.

Two continuing agreements funded by A.I.D. focus on the development of human resource capacity in both the public and private sectors. The Field Technical Advisors agreement provides technical assistance to A.I.D. Washington and A.I.D. missions in Eastern Europe, Newly Independent States, Asia, Africa, Latin America and Near East, host-country governments, public and private organizations, and universities involved in training A.I.D.-sponsored students in agriculture, agribusiness, rural development, and related areas. Increasing emphasis is being placed on program evaluation and initiation of follow-on activities, including establishment of country and regional scientific and agribusiness networks to maintain mutually beneficial relationships with similar U.S. organizations and associations. In fiscal 93 the agreement was amended to provide programmatic support to the Newly Independent States Task Force of A.I.D. with education and training activities, including needs assessments and development of country training plans.

The A.I.D./Africa Human Resources Development Assistance and African Training for Leadership and Advanced Skills agreement provides technical assistance to A.I.D. African missions and to U.S. and African training programmers and providers. This includes assistance in training needs assessments in agriculture, agribusiness, and related areas, and identification of education

and training programs to meet these needs. Emphasis is placed on enhancing the essential relationships between the public and private sector that are necessary for establishing effective and efficient food and fiber systems essential to the viability of agribusinesses and sustained economic development. In fiscal 93 planning was initiated for conducting short courses in Africa on Agribusiness Planning, utilizing the resources of USDA and its university network.

Venezuela-United States Agricultural Commission

The ministerial-level Venezuela-United States Agricultural Commission met twice during fiscal 1993--in Venezuela in October 1992 and in Washington, D.C., in March/April 1993. Principal recommendations dealt with enhancing Venezuelan agricultural research and extension systems, strengthening agricultural statistical and economic information, and improving management of the country's renewable natural resources. Upon recommendation of the Commission, a Caracas workshop on agricultural import regulations was held in November 1992. The Commission's term was renewed for an additional 4 years in January 1993.

U.S. scientists are benefitting through Commission-recommended scientific collaboration, such as the U.S. plant breeder who continues to obtain valuable wild potato germplasm. Biological pest control research on sweetpotato white fly control in Venezuela is promising. A USDA Forest Service specialist is now residing in eastern Venezuela, on a reimbursable basis, to promote tropical forest reclamation in severely damaged mining areas. U.S. soil conservationists visited Venezuela to plan reimbursable collaborative projects to protect highland watersheds. Experts from the Agricultural Marketing Service also are working with the Ministry of Agriculture and Livestock (MAC) to provide reimbursable technical advice in developing internationally recognized grades and standards for meat products and livestock in Venezuela and to help establish a market information system for livestock and meat. Such standards and market information system could potentially benefit U.S. cattle and meat exporters who wish to enter Venezuela's premium-quality niche markets.

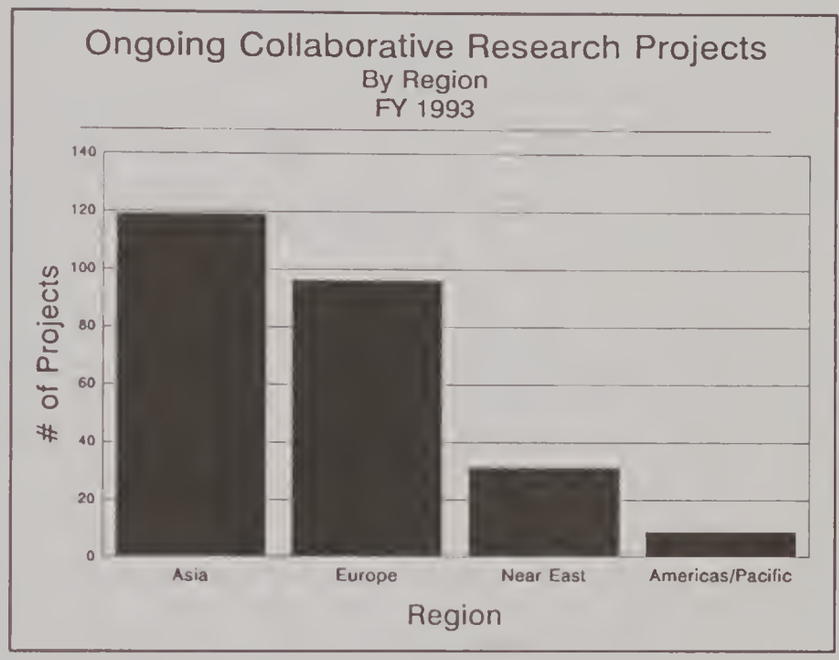
Other activities planned include: 1) a reimbursable visit by an Agricultural Cooperative Service expert to advise Venezuelan agricultural cooperatives on organization and management of cooperatives; 2) a reimbursable technical assistance project, involving teams of Economic Research Service economists to advise MAC on developing a system for analyzing economic information on agricultural production and marketing; and 3) U.S. visits by Venezuelan technical experts related to soils correlation and plant germplasm evaluation, classification, and storage.

RESEARCH AND SCIENTIFIC EXCHANGES

In fiscal 93, the Research and Scientific Exchanges Division managed 255 collaborative research projects in 24 countries on a wide array of topics (Appendix F). These included 175 projects in 7 countries utilizing foreign currencies (Appendix G). Scientific exchange teams visited 32 countries during the same period (Appendix H).

Collaborative Research

The International Collaborative Research Program was established in 1982 to enable U.S. scientists to conduct joint research on high-priority U.S. agricultural problems with researchers in developed and developing countries. The program has supported joint projects with foreign counterparts in 28 countries.



Ireland: RSED administers a multidimensional program of activities with Ireland. The purpose of the U.S.-Ireland program is to encourage the exchange of information and people between the United States and Ireland in agricultural science, technology, and agribusiness. Program elements include short-term scientific exchanges, long-term collaborative research, special workshops, agribusiness opportunity missions, and the Graduate Agribusiness Associates Internship Program.

Accomplishments. As major livestock and dairy producers, the United States and Ireland have a common interest in preventing and controlling animal diseases. Joint work has led to advances in fighting tick-borne diseases, bovine tuberculosis and paratuberculosis, and diseases that can be transmitted from animals to humans.

During a short-term exchange with Ireland, U.S. researchers learned how to use a computer to monitor the terrain covered by a grazing animal and to measure the amount of forage consumed. This technique is helpful in developing optimum grazing schedules and in enhancing sustainable agricultural systems for small livestock

producers in the United States.

As part of a collaborative research project, USDA scientists and scientists at University College, Cork, and Moorepark Research Center are working together to find new ways to lower the fat content in food products, such as creams and sauces, while maintaining desirable texture, stability, and taste.

Both sides are cooperating in the field of biotechnology to solve disease problems in fish and shellfish aquaculture.

New Initiatives. USDA is exploring a program which would allow outstanding recent Ph.D.s from Ireland to come to the United States for post-doctoral training. The program would focus on areas of agricultural science which are needed to solve U.S. and Irish agricultural challenges. This program may involve establishing a fund to provide fellowships to support Irish post-doctoral fellows in federal and U.S. university laboratories.

USDA and the Irish National Food Center are working on a special Spring 1994 workshop that will examine priority issues affecting the microbiological safety of meat products (including beef, pork, lamb, and poultry) that are relevant to the meat industries in the United States and Ireland, and to identify priority areas for research and development in meat safety.

Egypt - NARP: RSED has an agreement with A.I.D./Cairo to work with Egypt's National Agriculture Research Project (NARP). The effort has four components: collaborative research, new initiatives, agricultural library, and technology transfer.

Currently NARP has 28 research projects, with research being conducted in both the United States and Egypt on integrated pest management, remote sensing, animal health, computer expert systems, genetic engineering, food consumption patterns and post-harvest technology. Funding averages $300,000 per project.

Through the new initiatives component USDA provides short-term consultants in biotechnology. Under the agricultural library component, USDA's National Agricultural Library is providing technical assistance to Egypt in setting up similar systems. In technology transfer, USDA has had a resident advisor in Cairo and is currently working with USDA's Extension Service to develop reciprocal visits to extension systems in the United States and Egypt.

Trinational (Egypt-Israel-U.S.) Agricultural Research Cooperation. This program promotes agricultural cooperation among the United States, Israel, and her Arab neighbors, and accelerates agricultural development in participating Middle Eastern nations. Trinational projects are funded by A.I.D.'s Middle East Regional

Cooperation Program in support of the Israeli-Arab peace process. Current activities include research and development efforts in horticultural crops and in diseases of livestock.

Excellent working relationships which have weathered the region's political storms have developed between the Egyptian and Israeli scientists involved. In certain cases these have led to numerous joint publications, particularly in soil solarization and animal diseases.

Since its inception in 1990, the Trinational Animal Health Research Project (TAHRP) has provided channels for timely exchange of information between Egypt and Israel on the region's livestock disease outbreaks and control measures being taken. In addition to intensive field and laboratory research on three major animal diseases, TAHRP also sponsored two veterinary symposia (in Israel, April 1992 and in Egypt, June 1993). TAHRP has been highly praised by the team which conducted the project's first external evaluation (June 1993).

In the Trinational Nubaseed Development Project (1989-93), cooperation and exchange of expertise between Egypt and Israel have been extensive. Many Israeli scientists and managers, who provided consulting services and on-site training in Egypt (including resident technicians), were well received by the Egyptians and made a significant contribution to project progress. A substantial number of Egyptian staff and farmers visited Israel. Training of staff and farmers has been continuous, both on and around the core farm in Egypt, and over 150 have been to Israel for training. Egypt plans to train 34,000 graduate settlers in various technical subjects (plus cooperatives and management), including training 1,700 in Israel.

Foreign Currency/Joint Board Research

Description of Current Activities

USDA uses U.S.-owned foreign currencies to support cooperative research on agricultural and forestry problems of interest to the United States and participating foreign countries. Since the program's inception in 1958, over 2,400 research projects have been carried out in 35 countries.

Currently, projects are underway in Costa Rica, Egypt, Hungary, India, Pakistan, Poland, the Czech Republic, Slovakia, Taiwan, Croatia, Slovenia, and Macedonia.

The Foreign Currency/Joint Board Research Program involves several USDA agencies, and includes other Federal departments and U.S. universities. OICD's Far Eastern Regional Research Office (FERRO) in New Delhi, India, works with RSED in managing research cooperation with Asian countries.

RSED issues foreign currency research grants to institutions and universities in foreign countries in which U.S.-owned foreign currencies are available or in which special funds have been established via bilateral agreements through the U.S. State Department. Projects funded must benefit the United States as well as the foreign country. They include a wide range of topics in the agricultural sciences, including germplasm, animal sciences, aquaculture, biological control, food technology, agro-environmental problems, and forestry.

The FCR program, using U.S.-owned foreign currency, currently has 144 active grants in 7 countries with a dollar value of $11 million. More than 150 scientists at USDA and university laboratories participate in this program.

In Central and Eastern Europe (Hungary, Poland, Czech Republic, Slovakia, Slovenia, Croatia), the Foreign Currency and Joint Board Research Programs provide funding for research in the agricultural sciences of importance to the U.S. research community and industry. Most of the research work is conducted overseas. Current program emphasis is closely aligned with U.S. domestic research priorities and includes work on biological control of exotic plant and animal pests and diseases; germplasm collection, evaluation, and exchange; and improving environmental quality. Collectively, the two programs have 63 research grants worth $3.7 million. Approximately 70 U.S. scientists in federal, state, and university laboratories participate with the foreign scientists in this research.

Accomplishments and Examples of Recent Progress

The significance of this research is illustrated by the results of several ongoing research projects:

Sour Cherry Germplasm. Hungarian researchers are cooperating with scientists from the United States to analyze samples of germplasm from Hungarian sour cherry trees to identify disease resistance. The germplasm screened as part of this cooperative research has formed the basis for the development of new disease-resistant varieties for the U.S. cherry industry.

Grape Germplasm. California vineyards benefitted from collaborative research on susceptibility of grape rootstock to the bacterial disease known as crown gall. Many vineyards were being replanted due to susceptibility of grapes to a new deadly plant louse. The collaborative research supported by the Joint Fund provided evidence that the preferred rootstock suggested for re-planting was, in fact, highly susceptible to crown gall. As a result of this research, alternative varieties were recommended, at a great savings to the grape industry of California.

Cattle Breeding. A new mechanism for monitoring hormonal effects on the reproductive system of cattle was developed under a

cooperative research project with Polish scientists. The results of this research can be used to predict optimal conditions for cattle breeding.

Sweetpotato Whitefly. The Foreign Currency Research Program provides access to natural enemies of the sweetpotato Whitefly, *Bemesia tabaci* (SPWF), a major agricultural pest worldwide. SPWF infests more than 500 plant species, representing 74 families. Recently it has inflicted devastating losses on agriculture in California, Arizona, Texas, and elsewhere in the United States. In certain areas it has reduced melon production by over 80 percent and severely threatens production of cotton and virtually every winter vegetable. In addition to losses caused directly by its feeding, the sweetpotato whitefly also is an important vector of plant disease, particularly viruses. Nineteen viruses are known to be transmitted by SPWF, including several mosaic and leaf-curl viruses. SPWF is resistant to most insecticides. Despite massive spraying, its numbers continue to increase.

RSED made it possible for USDA specialists to make field observations on the natural enemies of SPWF throughout the Indian subcontinent, and to collect and ship to U.S. cooperators several pathogens and parasitoids of SPWF. The collections of parasitic insects and pathogenic fungi from Pakistan, India, and Nepal arrived in good condition at quarantine facilities in the United States, and are being evaluated for their biocontrol potential.

New Initiatives

New initiatives in the Foreign Currency Research program may include the Baltic Republics under the Joint Fund program. The U.S. Department of State allocated dollar resources to various technical agencies to undertake collaborative research with the Baltic Republics and if funding becomes available in fiscal 1994, it is likely that the State Department will initiate formal agreements with matching foreign currencies.

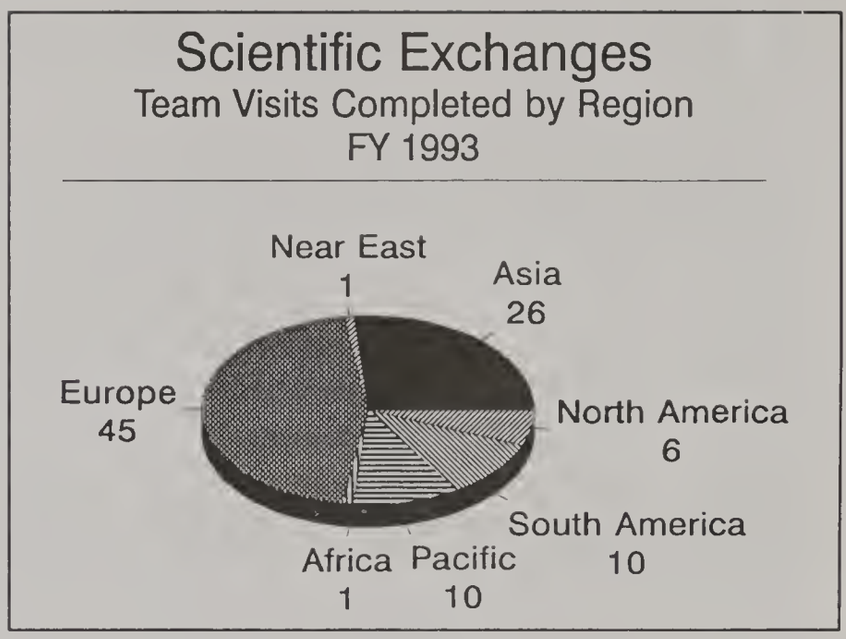
Scientific Exchanges

Description of Current Activities

The Scientific Exchange Program promotes international cooperation to attain mutual benefits through short-term exchange visits (one to six weeks) between U.S. and foreign scientists. These exchanges help transfer agricultural data, technology, exotic germplasm, and biological materials invaluable in research to improve crops, forestry, and livestock.

Proposals are accepted from U.S. scientists for exchanges with any country where benefits to U.S. agriculture may accrue.

Accomplishments and Examples of Recent Progress



The recent arrival of the pine shoot beetle, Tomicus piniperda, a serious pest of coniferous trees, poses a threat to the U.S. multimillion dollar Christmas tree industry. First discovered in the United States in June 1991, the pine shoot beetle has caused USDA's Animal and Plant Health Inspection Service (APHIS) to quarantine portions of 6 States: Illinois, Indiana, Ohio, Michigan, New York, and Pennsylvania.

APHIS held an interagency work group meeting January 11-15, 1993, to discuss ways of confronting the pine shoot beetle. RSED provided funding for two Scandinavian experts to attend the meeting and share their knowledge and experience in dealing with the insect. APHIS had planned to implement a trapping strategy to detect and monitor the pine shoot beetle. However, the Scandinavian scientists indicated that trapping had not helped detect the insect in Europe. They suggested alternative detection methods, thereby saving USDA several hundred thousand dollars. RSED supported a follow-up visit by Dr. Bo Langstrom from Sweden in December 1993.

Exchanges With the Former Soviet Union

ARS - Russia & Ukraine Cooperation. OICD/RSED provided funding for six ARS teams to visit counterpart institutions in Russia and Ukraine for the purpose of implementing cooperative activities of mutual benefit. The teams focused on: academy and ministerial interaction, plant germplasm, biological control, bioproduct development, biosystematics and biodiversity, and animal germplasm. More than 20 cooperative agreements have been written or are in process as a result of these team visits.

Russian Far East. RSED secured significant USDA representation on a delegation of U.S. science and technology agencies to the Russian Far East to explore possibilities for research cooperation with institutions in the Russian Far East. Four USDA (ARS, FS, SCS, OICD) agencies sent representatives .

Exchanges with China and the Mongolian People's Republic

Description of Current Activities

Twenty teams of scientists, 10 from both the United States and the People's Republic of China (P.R.C.), participated in exchanges under the scientific and technical exchange agreement signed between USDA and the P.R.C. Ministry of Agriculture.

A third U.S. scientific exchange team visited the Mongolian People's Republic under the U.S.-Mongolia Scientific Exchange protocol to perform soil surveys for a database on soil resources.

Long-term, joint research programs continued in the areas of biological control, plant genetic resources, and grassland plant materials.

Accomplishments and Examples of Recent Progress

U.S. scientists had the opportunity to research Chinese natural resources and agricultural practices and explore possible applications to American agriculture. In particular, three U.S. teams evaluated and collected grass germplasm for forage and turf applications in the United States. Another team collected parasitic wasps for biological control of filth fly in U.S. livestock operations.

Reciprocal visits of U.S. and Chinese scientists on various subjects produced a more effective exchange of information and expertise. Additional long-term, collaborative research projects resulted from scientific exchange visits for the exchange of data, expertise, and technical personnel.

Objectives/New Initiatives

Scientific and technical exchange programs and long-term, collaborative research projects resulting from these visits will continue. Discussions are underway on receiving additional Chinese scientific teams on a sending-side-pays basis. Teams from the Ministry of Agriculture/Chinese Academy of Agricultural Sciences, Ministry of Water Resources, Ministry of Forestry, Ministry of Commerce and/or State Science and Technology Commission would be ccordinated by RSED.

Reimbursable Programs

India - Plant Genetic Resources Project: Its purpose is to support implementation of the Plant Genetic Resources Project (PGR) by arranging and managing U.S.-based training and professional development opportunities for selected scientists; to assist in organizing in-country training workshops for Indian and neighboring

country scientists; and arranging for international experts to conduct specialized in-country training. The goal is to preserve India's rich and diverse plant genetic resources, particularly for advances in agriculture. The United States is interested in Indian germplasm, and India is interested in the U.S. germplasm collection system. USDA also supports explorations by joint teams for germ plasm collection in the United States and in India. Agricultural Research Service, Animal and Plant and Health Inspection Service, and Land-Grant University scientists and technicians participate in this project. Funding for the PGR project is currently $450,000.

The India Plant Genetic Resources project began in February 1990 and is scheduled to continue until August 1994. The project will likely be extended to August 1996. At the end of the project the Indian Government is to have in place the organizational structure, trained technical staff, and physical facilities and equipment to manage a national system which sustains all aspects of exploration, collection, preservation, evaluation, quarantine, documentation, and exchange of plant germplasm.

By 1995, the Gene Storage Bank in New Delhi will be near completion, and the equipment in place. Several consultants will be needed to finalize the building specifications and to provide on-site training and technical assistance.

Central and Eastern Europe - Support for Eastern European Democracies (SEED) Act: The focus for OICD's SEED projects is to introduce current technologies of environmentally sustainable agricultural management practices to Central and Eastern European countries. This program has been designed to reduce the environmental effects of pollution from past centralized industrial, mining, and agricultural activities while supporting the economic development of these countries in transition. Additionally, the program is providing policy support to ensure that agricultural practices are conducted efficiently and sustainably.

Examples of SEED Agricultural Programs

Heavy Metal Soil and Water Contamination in Bulgaria. The Bulgarian Minister of Agriculture requested RSED to send a team to Bulgaria to examine the arsenic contamination of irrigation water in the Topolnitza Reservoir. As a result, USDA and Bulgarian scientists from the Ministries of Agriculture, Health, and Environment developed the scientific basis for the Government of Bulgaria to use to address the public's grave concern of arsenic toxicity in rice grown in the Topolnitza irrigation district.

Two exceptionally well-qualified Bulgarian scientists, from the Ministries of Health and Agriculture, have received training in the United States to use the sophisticated laboratory equipment

required to perform controlled, highly reliable analyses of contaminated soil, water, plants, and animal tissue.

USDA provided the Ministry of Agriculture with a package of U.S.-made laboratory instruments. This advanced equipment will allow the cooperating Ministries to: a) build the scientific basis for sound national environmental policy, regulations, and legislation; b) develop strategies to manage and reclaim contaminated soil and water resources; c) develop the environmental basis for the privatization of agricultural land; d) develop methods to assure that export-market crops meet international trading standards and requirements; and e) select alternative crops that do not accumulate toxic levels of heavy metals when grown on contaminated soils.

There are two components planned for follow-up activities. The first component will focus on remediation of heavy metal toxicity problems associated with lead smelters near the industrial cities of Plovdiv and Kardzali. The second will focus on laboratory methodology to assure the scientific integrity of laboratory analysis and environmental sampling.

Integrated Pest Management of Orchards - Romania, Poland, Hungary, and Czech Republic. The objective of this program is to provide technical assistance, training, and equipment to address the agricultural resource management practices that impact water quality, specifically integrated pest management (IPM) in apple orchards. These technologies will be demonstrated on both private and state farms close to the areas where the technologies are being tested.

Point Source and Non Point Source Water Quality - Bulgaria. The purpose of this program is to evaluate ground and surface water contaminated by agricultural sources, especially point source pollution caused by concentrated livestock operations. Activities include demonstration of appropriate technologies and management practices, monitoring, and evaluation of sources of groundwater contamination, and developing support systems to manage and regulate agriculturally based pollution.

Emerging Democracies Baltics Program. The 1990 Farm Bill contains a Congressional mandate to share U.S. agricultural expertise in food and agribusiness with formerly socialist nations such as Lithuania, Latvia, and Estonia. The goal is to develop, maintain or expand markets for U.S. agricultural goods and services.

1993 activities included sponsorship of agriculture and business specialists for study-tours throughout the United States. RSED also sent 10 research specialists to the Baltics to assess or start related projects. Research areas have included animal housing, forage grasses, small grains, dairy cattle genetics, dairy production, and extension.

1994 activities will expand to include the placement of a resident advisor in Latvia, technical training for extension service agents, and expanded efforts to promote information exchanges through CD-ROM technology and the distribution of journals and related materials.

Special Activities and Emphases

International Agricultural Research Centers. RSED supports increased U.S. involvement with the International Agricultural Research Centers (IARCs) of the Consultative Group on International Agricultural Research (CGIAR).

Description of Current Activities

The National Committee for International Science and Education (NCISE) solicited applications for Research Fellowships under its Pilot Linkage Program to foster linkages with the International Agricultural Research Centers (IARCs). RSED and Ohio State University are the implementing organizations on behalf of NCISE. Objectives include:

- o To promote long-term, mutually beneficial linkages with the IARCs and affiliated organizations,
- o To further scientific collaboration by awarding research fellowships to U.S. scientists, and
- o To encourage innovative approaches in the food and agricultural sciences.

In 1993, 8 awards were made for linkages with CIAT (3), CIMMYT (2), ICRISAT Sahelian Center, AVRDC, and ICARDA.

International R&D on Non-Food, Non-Feed Uses for Agricultural Commodities. Several international activities targeted toward expanded non-food and non-feed uses for agricultural commodities are supported by OICD. Examples include:

Foreign Currency Grants (basic and applied research & engineering):

- o Analysis of lesser known seed oils, deriving their fatty acids, and screening these fatty chemicals for possible use in agricultural and oleochemical industry,
- o Development of yarn and fabric structures for better apparel comfort with air texturing using cotton and cotton/synthetic fiber blends,
- o Studies on production and uses of newer sources of industrially potential gums, and

- o Tannins as specialty chemicals.

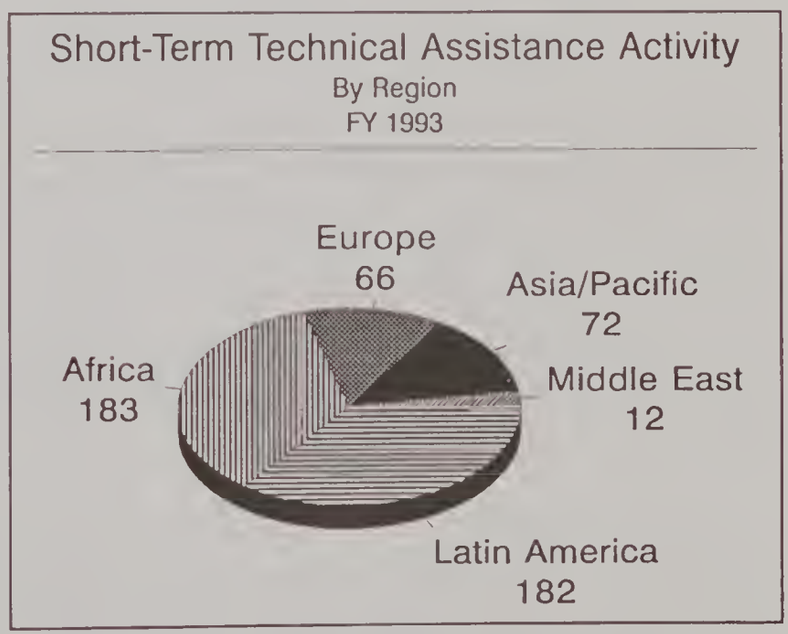
Scientific Exchanges:

- o Exchange of data and information on post-production marketability of ornamental crops,
- o Functional properties and interactions of lipids and proteins in carbohydrate stabilized emulsions,
- o Development of new cellulose solvent systems, and
- o Economic analysis of the future of Japanese agriculture and its implications for U.S. trade.

OICD's solicitation and selection of proposals for scientific exchanges and collaborative research for 1993 and beyond places special emphasis on providing access for USDA and U.S. university scientists to international research and development of non-food and non-feed uses for agricultural products.

Spanish Professional Development Program

OICD/RSED secured placement for Instituto Nacional de Investigaciones Agrarias (INIA) sponsored graduate students, post doctoral fellows, and visiting scientists in U.S. universities and USDA laboratories. OICD/RSED provided administrative and program support for these visitors while they are in the United States. In fiscal 1993 the Professional Development Program supported 44 Spanish graduate students and post doctoral fellows at 25 U.S universities.

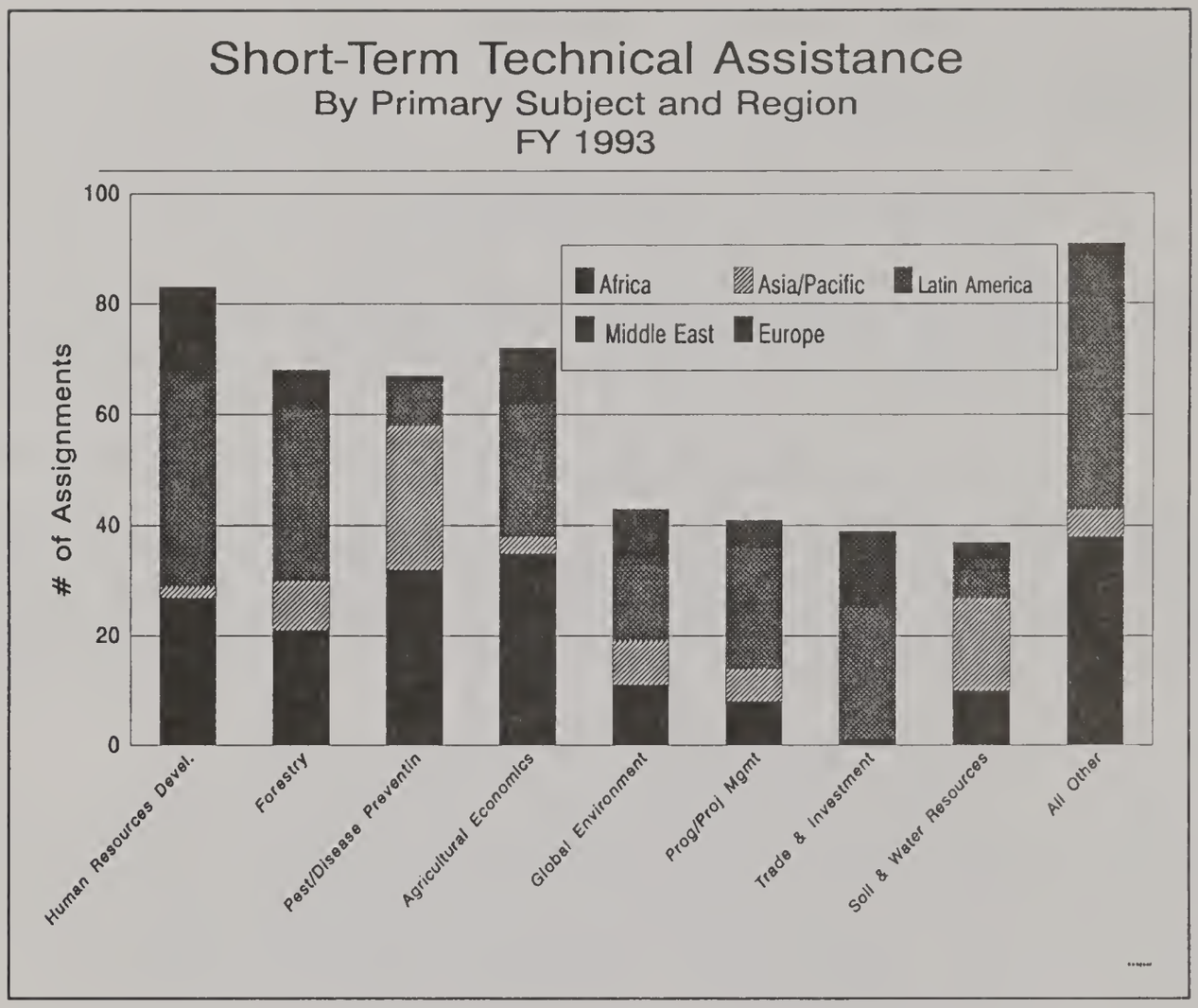


DEVELOPMENT RESOURCES

In fiscal 1993, more than 500 experts carried out short-term assignments throughout the world on the full range of agricultural development topics (Appendix I). Some examples follow.

Forestry Support Program

Under an agreement with the A.I.D., OICD and the Forest Service are implementing the



Forestry Support Program (FSP), which provides technical assistance to A.I.D.'s natural resource projects worldwide. Building on FSP's success over a period of more than 10 years, the agencies signed a new agreement to expand the program. Activities involve a wide variety of collaborators (including universities and some private sector groups) to provide technical assistance, address training needs, include women in development goals, link institutions, develop materials, respond to natural disasters and emergencies, and provide other services. The program also maintains an extensive roster of individuals with forestry and natural resources expertise available to work in international programs.

Energy and the Environment

Development Resources has entered into a Resources Support Services Agreement (RSSA) with A.I.D.'s Global Bureau to provide technical specialists in the areas of natural resources, energy, the environment, and sustainability. The RSSA originated in October 1991. Since that time A.I.D. has requested 39 professional support positions in: environmental training and education; environmental

and natural resource economics and policy; global climate change; forestry conservation and management; energy production and conservation; biological diversity; environmental database management; and energy policy and planning.

An institutional and programmatic relationship between USDA and A.I.D. in matters of energy and environment has been incorporated into this RSSA to ensure that USDA agencies have a technical and policy input. The agreement also provides for agency RSSA staff to maintain their technical linkages, career tracks, and domestic ties with their home agencies while on A.I.D.-funded assignments. The relationship between A.I.D. and USDA enables USDA to link international work in energy, environment, and natural resources under the RSSA to their domestic programs and clients.

Through 1993 a total of 32 people from various agencies, universities, and the private sector have been assigned to work on the RSSA.

Agricultural Production Program Development and Support

This RSSA serves and is funded by the Office of Agriculture of the Global Bureau of A.I.D. Priorities of work under this activity include long-term assistance in agricultural policy and sector planning, sustainable agricultural systems, soil sciences, plant protection, as well as such cutting-edge technologies as integrated pest management, biotechnology, and bioremediation. Long-term technical positions under this project have increased during 1993 and are filled by USDA experts in plant pathology, entomology, soil microbiology, natural resource management, biotechnology, and biodiversity. These individuals manage A.I.D. projects and provide technical assistance directly to field missions.

Technical Support Agreement

Development Resources also has operating agreements with A.I.D.'s Bureaus for Africa, Asia, Latin America, and the Caribbean, and Research and Development to provide a wide range of technical services of mutual interest and benefit to USDA and A.I.D. Some 60 USDA employees provided long-term technical support to those offices in 1993. This assistance included technicians in agricultural economics, pest management, plant quarantine, food policy and food security, natural resource and environmental management, and rural finances. In addition, USDA performed numerous studies, designed systems, developed materials and accomplished other short-term assignments under those agreements.

Information Research Service in Agriculture and the Environment

Under another agreement with A.I.D., the Technical Inquiries Group (TIG) researches, selects, and provides technical information needed in the design and implementation of agricultural,

agribusiness, natural resource, and environmental management projects worldwide. Characterized as "timely, relevant, unique, well-researched and dependable," TIG's efforts help facilitate policy dialogue between A.I.D. and host-governments, address program and project issues, and solve technical problems by linking users with worldwide research results, technology applications, and state-of-the-art information.

During 1993, the TIG staff of four researched information on 1,107 topics in response to technical inquiries, resulting in the dissemination of 4,747 documents to A.I.D. staff, project implementers, and cooperators. Utilized were data sources, economic analyses, publications and the expertise of USDA's many agencies, including the worldwide collection of the National Agricultural Library. USDA's network of land-grant universities and other cooperating institutions worldwide, private firms, and trade associations also were regularly tapped for information and technical advice.

In fiscal 93, A.I.D. conducted an in-depth evaluation of the service, concluding that TIG provides high-value output for which there is a continuing need.

Famine Mitigation Activity

The Division's agreement with A.I.D. Office of U.S. Foreign Disaster Assistance (OFDA) to implement the Famine Mitigation Activity (FMA) is part of the effort of A.I.D. to assist famine response agencies and personnel to develop and design effective interventions in response to extreme food insecurity and famine situations. With input from a broad range of specialists, resources have been identified to help develop programs and projects in the areas of early warning and response systems, rapid assessment methodologies, seeds and tools interventions, livestock interventions, water resources development, market interventions, food/cash for work programs, and to provide assistance under conflict situations. In fiscal 93, FMA:

- Provided technical assistance to the A.I.D. missions in South Africa, Niger, and Haiti,

- Established a Famine Mitigation Document Resource Collection with over 3,000 related books, studies and reports on famine-related topics,

- Detailed a staff member to Nairobi, Kenya, to assist the Disaster Assistance Response Team for Somalia relief effort, and

- Provided grants to the International Institute for Tropical Agriculture for drought-resistant varieties of cassava and sweetpotato production and for development

and distribution of heat-resistant Rinderpest vaccines in the Horn of Africa.

South Pacific

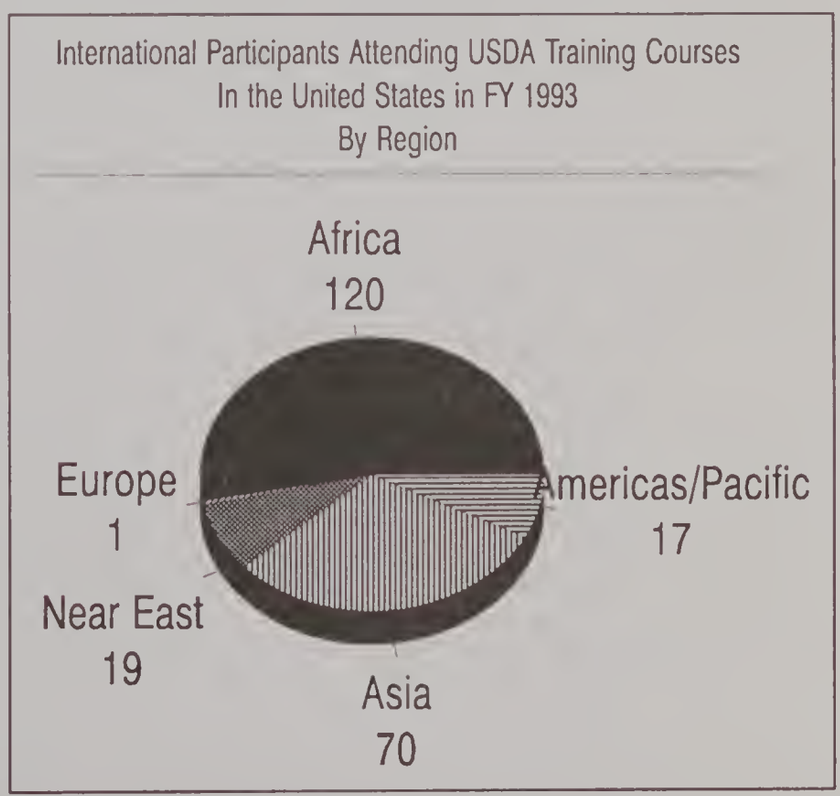
Under the Commercial Agricultural Development Project PASA with A.I.D. in Suva, Fiji, the Agricultural Research Service (ARS) has provided technical assistance to the Pacific Islands by transferring quarantine treatment technology for fresh fruits and vegetables. This quarantine treatment technology emphasizes high-temperature forced-air treatment for fruit flies. ARS provided the initial testing equipment and training in equipment use and developing research protocols. The project goal is to increase the value of agricultural exports to regional niche markets.

Eastern Europe and the Newly Independent States

The Division is assisting USDA's Forest Service in a variety of activities in Russia, and the Agricultural Marketing Service in market information initiatives in Russia and Bulgaria.

Technical Training

The Management and Course Development Branch (MCD) provides relevant and appropriate training and technical assistance for international agricultural professionals and organizations from lower and middle-income nations and the newly emerging democracies in order to promote and enhance sustainable agricultural development throughout the world. MCD collaborates within USDA and other government agencies, universities, and private sector to conduct quality, state-of-the-art activities that are applicable to home-country situations, thus contributing to world agricultural prosperity.



During 1993, a total of 365 participants were trained in MCD programs. In the United States, 21 technical courses were conducted for 277 participants from 49 countries around the

world. Additionally, 17 participants from Saudi Arabia were trained in the United States in two tailored courses, for a total of 294 participants trained in the United States. Overseas, two courses were conducted in Uganda and one in Nigeria, training a total of 71 participants (Appendix J).

Management

Through a Resources Support Service Agreement with A.I.D.'s Research and Development Bureau, MCD manages the Implementing Policy Change (IPC) Project which is in its second year of implementation. Its objective is to support developing country managers in implementing important and difficult policy changes. Short-term technical cooperation activities have taken place in 12 countries in Africa, Latin America, and the Caribbean, and Asia.

Two long-term efforts are underway. One supports existing export promotion in the Philippines and the other focuses on fiscal policy analysis and implementation in Jamaica. One long-term effort in Guinea-Bissau supports private sector trade and investment.

Saudi Arabia

Since 1975, USDA has cooperated with the U.S. Treasury Department in implementing technical assistance activities in Saudi Arabia. In the Agriculture and Water (AGWAT) project, under the United States-Saudi Arabian Joint Commission on Economic Cooperation, USDA is working with the Saudi Ministry of Agriculture and Water Resources to develop its National Agriculture and Water Research Center (NAWRC) at Riyadh. The project emphasizes training of up to 1 year's duration for Saudi scientific staff in research topics at USDA and university research facilities. Two OICD agricultural scientists, stationed at NAWRC, serve as mentors for their Saudi colleagues.

Other activities include the following:

- In order to improve the Government of Morocco's ability to collect and publish timely agricultural statistics, undertake economic and policy analysis, and plan, monitor, and evaluate agricultural projects, DRD coordinated the participation of ERS, NASS, ES, and other USDA agencies in training, in-country workshops, and the development of professional linkages between the Ministry of Agriculture and USDA.

- Under the A.I.D.-supported Moroccan Agribusiness Promotion activity, OICD is coordinating assistance from APHIS, AMS, ARS, the Food Safety and Inspection Service (FSIS), Food and Nutrition Service (FNS), the Agricultural Cooperative Service (ACS), and ES to help increase the capacity of the private agribusiness sector

to produce, package, and market specific agricultural commodities.

- DRD, under arrangements with land-grant universities, assisted the A.I.D. Guatemala Private Enterprise Development Project, providing technical advisors to several thousand small-scale business owners and employees, expanding the availability and diffusion of vital market information to buyers, sellers, producers, and manufactures.

INTERNATIONAL ORGANIZATIONS/EXTERNAL AFFAIRS

The International Organizations Division (IOD) manages the USDA's role in roughly 30 international organizations and consultative committees concerned with global food and agricultural systems and the environment.

The External Affairs Staff (EA) continued to provide support for a wide variety of the Agency's communication and liaison services and functions. These included: public information; technical information; congressional liaison; liaison with international organizations; and liaison with U.S. land-grant colleges and universities, with a special focus on the historically black colleges and universities, and the Hispanic colleges and universities. EA also provided the executive secretary and coordinated the meetings of the USDA International Contacts Group, comprised of representatives of USDA agencies and OICD's division directors and program leaders.

Food and Agriculture Organization (FAO)

OICD, in cooperation with the Department of State and USDA's program agencies, worked to assure that FAO establish and implement improved governance procedures and implement clear program priorities. As a result of OICD leadership, the interests of USDA program agencies are well reflected in FAO's 1994-95 Program of Work and in the budget adopted to support these programs.

OICD coordinated interagency activities preparatory to the biennial FAO Conference held in November 1993. USDA's Deputy Secretary Romminger headed the U.S. delegation and cast the U.S. vote in the Director General election. His address to the conference focused attention on FAO programs of importance to U.S. agriculture including sustainable agriculture, plant and animal genetic resources, global information systems, and 'Codex Alimentarius.' IOD staff accompanied the delegation in technical advisory and support roles.

OICD, APHIS, and ARS worked jointly to assure that FAO moved quickly to staff and initiate an effective work plan to guide the

program of a special secretariat formed to oversee the International Plant Protection Convention.

OICD and ARS worked together to assure that the United States is effectively represented in the programs of FAO's Working Group on Plant Genetic Resources in order to assure that the rights of U.S. plant breeders and farm businesses are protected. In 1993, the United States completed a 4-year term as the North American representative on the Working Group.

OICD and the Forest Service assisted FAO in the formation of a consultative group to implement the Tropical Forestry Action Program.

OICD and ARS developed a strategy calling for more rapid progress by FAO for follow up activities on plant and animal genetic resources undertaken in response to UNCED.

Inter-American Institute for Cooperation in Agriculture (IICA)

USDA staff coordinated preparation for and participated in the June 1993 executive committee meeting of IICA held in San Jose, Costa Rica. The U.S. delegation worked to hold the IICA core budget to a zero real growth rate for 1994 and 1995, after adjustment for projected inflation.

OICD staff coordinated interagency activities, leading to the adoption of a revised program of work for the IICA. The revised program focuses on sustainable agriculture and on activities needed to facilitate trade in agricultural commodities and products in the hemisphere.

The Inter-American Board for Agriculture, meeting in Mexico City in September, elected Carlos Aquino Gonzales of the Dominican Republic to serve a four year term as the Director General of IICA. The United States supported Mr. Aquino for this position. The Director General-elect selected David Joslyn of the United States, as his deputy director general. They assumed their duties on January 14, 1994.

OICD staff, in cooperation with USDA agencies, continues to participate in the governing and program oversight committees of the Central American Tropical Agricultural Research and Training Institute (CATIE). These committees include oversight of a restructuring mandated in 1992 by the Inter-American Conference of Ministers of Agriculture.

Organization for Economic Cooperation & Development (OECD):

OICD, in its role of protecting U.S. agricultural interests,

continued to monitor OECD activities, especially the work of its Commission on Agriculture, to assure that U.S. views on agricultural policy and trade were fully and accurately represented before the international community. A 1993 initiative was establishment of an inter-departmental committee to look at environmental issues as related to agriculture. Extensive effort by EPA, State Department, and various USDA agency and administration representatives led to a first-ever harmonization of views on a number of contentious issues and conflicting perspectives to permit formation of a unified U.S. position.

Placement of Americans in International Organizations:

OICD worked closely with the Department of State to increase the numbers of U.S. citizens employed in staff positions in FAO and other international organizations. The objective is to increase the percentage of Americans in senior staff and officer positions in the institutions which are part of the U.N. system. As a new initiative, OICD began collaboration with the Department's Office of Personnel (OP) to identify ways to strengthen these efforts. OICD and OP are coordinating an interagency committee process to resolve problems that might be restricting employees' interest in these jobs, and to develop strategies for recruiting and supporting highly qualified candidates for targeted positions.

Associate Professional Officers Program (APO)

In 1993, three additional Associate Professional Officers (APO) were recruited and posted under the APO Program. The objective of the program is to place highly qualified professionals in junior officer positions in international organizations. Two were assigned to the Food and Agricultural Organization in Rome -- one as a coordinator of follow-up activities growing out of the International Conference on Nutrition, and the second to an FAO Women in Development Project based in Cairo, Egypt. The third was assigned to the International Fund for Agricultural Development (IFAD) as an Agribusiness project officer for the Latin America region.

Liaison with Multilateral Banks

OICD staff provided leadership for OICD and USDA's liaison activities with the FAO, the World Bank, the Inter-American Development Bank, the Agency for International Development, and the U.S. international development community. These activities served three objectives: (1) to provide these institutions and bodies with information on USDA's international programs and each USDA agency's interests and capabilities; (2) to maintain and expand the level of requests for USDA's reimbursable technical services; and, (3) to identify areas where further collaboration would be of mutual interest and benefit.

OICD supported the Department's initiative to increase minority employment in USDA. In 1993, one OICD staff person remained on assignment as a liaison officer on the staff of Ft. Valley State College, Georgia -- a historically black school.

OICD staff coordinated the agency's response to requests for information received from the office of the secretary, other agencies of USDA, other Divisions of OICD, international organizations, and from U.S institutions and the private sector. The response to requests for technical information is accomplished through data base information retrieval, the resources of the National Agricultural Library and State universities, and by direct contacts with USDA's scientists and technical specialists.

ADMINISTRATION

In fiscal 1993, the administrative units of the agency decided to consolidate the project initiatives of previous years and to expand efforts in working with program staff for a better understanding of the administrative processes and program missions. The third-party draft initiative was fully implemented. Applications for the local-area network, such as the Country and Project Reporting System and the Miscellaneous Payment System, were completed and put to use. Connection with A.I.D.'s worldwide network for electronic mail was established. Connection to the Internet, via Extension Service, and telecommunication with FAS were being explored. The telephone system of the agency was totally converted to the technology of the Integrated Services Digital Network (ISDN). Security clearance and personnel action tracking systems were developed and put in operation.

IV. PROGRAMMATIC OBJECTIVES IN 1994

FOOD INDUSTRIES

During fiscal 1994 the Food Industries Division will pursue the following programmatic objectives:

- Increase the use of agreements to expand and enhance mutually beneficial collaboration between the USDA and A.I.D. in the areas of agribusiness development, investment, and two-way trade promotion;

- Increase and improve coordination/collaboration among the Division's three program areas and staff in order to substantially enhance the ability to develop and deliver a wider array of "here and there" programmatic services that will provide greater support to the continuing effort of OICD program participants and collaborations;

- Increase the interaction between USDA's RSSA staff, their A.I.D. colleagues, and the expertise of other USDA agencies in providing technical assistance and training activities related to the objectives of the RSSAs;

- Cooperate with the Development Resources Division in jointly pursuing new agreements with A.I.D. and additional income-generating agreements with other international donors;

- Forge stronger working relationships with U.S. agribusinesses and commodity and trade associations that enhance collaboration with the programs and activities of the Division;

- Seek sufficient funding (appropriated or reimbursable) to initiate a program of long term academic training with targeted republics of the Newly Independent States that will support and sustain development of market economies;

- Seek additional complementary funding for the Cochran Fellowship Program in order to expand the scope of the program. Special emphasis will be given to Eastern Europe, the Newly Independent States, and China;

- Carry out agribusiness opportunity missions and agricultural marketing workshops in Latin America, Africa, Central Europe, the Near East, and Asia;

- Further define the focus and improve the responsiveness of the Agribusiness Information Center related to the activities of the entire division and agency by increased use of electronic sources of information and linkages with other information centers. The intent is to move more towards becoming an information gateway rather than an information depository.

Food Industry Division targets are to:

- Expand funding for the Cochran Fellowship Program, and further expand program activities in participating countries;

- Cooperate with the Development Resources Division in carrying out RSSA and Participating Agency Service Agreements (PASA) activities in Africa, Asia, and the Near East;

- Organize and conduct three to four agribusiness opportunity missions in the Caribbean Basin, and Central European countries, and collaborate with other organizations on similar missions in Africa;

- Organize and conduct up to four agricultural marketing workshops in Poland and elsewhere in Central Europe, Latin America/Caribbean, Asian and African regions, Bulgaria, Venezuela, and possibly Panama and Hungary; Also conduct more specialized workshops (for example, wood-frame housing construction techniques and food packaging);

- Arrange and manage training programs for approximately 700 Cochran Fellowship Program participants and 300 participants funded by FAO and other international donors;

- Forge closer working relationships with food industry related associations by activating an informal Trade and Investment Program advisory committee, consisting of representatives from selected private organizations and businesses;

- Increase the involvement of historically black colleges and universities and Hispanic Association of Colleges and Universities in programs and activities of the Division;

- Continue outreach efforts to embassy representatives of selected African countries to further inform them about Food Industries Division ongoing programs and future plans;

- Continue to provide timely and appropriate information through the Agribusiness Information Center on trade development and investment opportunities in targeted regions and countries;

- Design and conduct, through the Human Resources Development Assistance RSSA with A.I.D., USDA Regional training workshops on agribusiness strategic planning and agromarkets in the United States; and

- Secure funding to provide in-country, follow-up professional development activities for Nicaragua training in cattle genetics and poultry production under USDA's Emerging Democracies program.

RESEARCH AND SCIENTIFIC EXCHANGES

The division in fiscal 1995 will focus its programs in priority areas identified by USDA and the U.S. agricultural science community. Specifically it will:

- Conduct and coordinate international efforts seeking substitutes for methyl bromide for soilborne and post-harvest disease and pest control;

- Provide backing for international exploration and evaluation of non-Apis pollinators;

- Support research and technology transfer efforts to assist FAS in resolving trade barriers, such as TCK smut, karnal bunt;

- Enhance international research and development on non-food, non-feed uses for agricultural commodities;

- Support international activities to strengthen research and outreach in human nutrition, diet, health, and food safety, including the soil quality and human health interface;

- Emphasize collaboration with the International Agricultural Research Centers, mainstreaming the Pilot Linkages into the Scientific Exchange and Collaborative Research Programs;

- Increase participation in the Scientific Exchange program of historically black colleges and universities and Hispanic-serving institutions (Target is a 20 percent increase over 1993); and

- Increase long-term collaboration with Mexico (Target is a 20 percent increase over 1993).

DEVELOPMENT RESOURCES

As a base of activities in 1994, the Division will continue to work closely with A.I.D. to provide jointly funded and reimbursable technical assistance and training. DRD continues to work closely with USDA agencies to facilitate their involvement in reimbursable and cooperative technical assistance and training activities.

DRD will seek to increase cooperative activities with other U.S. government agencies, United Nations agencies, FAO, the World Bank, the African Development Bank, the Asian Development Bank, other multilateral development banks, and host-country governments. It will emphasize collaboration with the U.S. private sector to enhance American firms' competitive positions in bidding for projects sponsored by the World Bank and regional development banks. U.S. firms which bid on agricultural development projects having elements that are clearly and traditionally governmental -- agricultural research and extension, soil and other natural resources conservation, agricultural statistics, market news and market regulation -- will be offered equal access to USDA resources

on a reimbursable basis.

Contributions to the sustainable global agricultural system in 1994 will emphasize the application of USDA skills to topical and technical areas of natural resources, forestry, environment, energy, economics, famine mitigation, disaster assistance, and gender considerations in international agricultural development.

Geographic emphasis will be in Central and Eastern Europe, the newly independent states of the former USSR and other emerging democracies in Europe and the Americas, plus targeted areas of southern Africa. OICD will continue to contribute technical and training skills to other Middle East and North African countries and other areas of traditional DRD-coordinated assistance, seeking new partnerships and mechanisms to meet local agricultural development needs.

Special emphasis will be on:

- Coordination, planning, and sharing resources of key players in international agricultural development, especially targeting those topical and technical areas noted above, and focusing on improved coordination within USDA and with specific others, including the Environmental Protection Agency, the Department of Energy, and the Peace Corps;

- Increased effort to involve U.S. agriculturalists in international activities so that they may become more familiar and comfortable with international food and nutrition, agriculture and natural resource practices, systems, issues, and challenges;

- Increased DRD interrelationships with staff and programs of other USDA agencies to increase familiarity with unique skills available in the Department and potential for assistance to sustainable international agricultural development;

- Ongoing identification of unique and scarce resources--human, institutional, technical, and other resources--and the establishment of mechanisms and relationships to allow access to those resources;

- More effective use of limited DRD staff resources through strategic planning, staff training, and additional cultural and foreign language experiences and opportunities; and

- Increased contacts and interaction with DRD staff on detail to A.I.D. and other agencies to heighten awareness of USDA technical capabilities in international

development and to ensure that the policy and procedural matters of the Department and OICD are understood and represented.

New Initiatives for FY 1994

Eastern Europe and the Former Soviet Union

DRD will be working with other divisions of OICD and other USDA agencies to develop extension, training, and collaborative research programs in the Baltic states.

Morocco Agribusiness Promotion Project (MAP)

Under the A.I.D.-supported Moroccan Agribusiness Promotion activity OICD will continue to coordinate assistance from AMS, ES, FSIS, APHIS, ARS, FNS, and ACS to help increase the capacity of the private agribusiness sector to produce, package, and market specific agricultural commodities.

South Pacific Commercial Agricultural Development Project

USDA will continue to assist several South Pacific island nations develop their plant quarantine capability. ARS will provide technical assistance in the area of plant quarantine treatment technology for certain fruit and vegetable exports from the region that are fruit fly hosts.

Science and Technology Collaboration With the United Arab Emirates

The Ministry of Agriculture and Fisheries of the United Arab Emirates (U.A.E.) wants to execute an agreement on science and technology collaboration with USDA. DRD is working with the Department of State to complete the necessary U.S. government agency clearances for such an agreement. Work with the U.A.E. Ministry will require considerable reimbursable technical assistance and training from USDA agencies. There is also mutual benefit from research into technologies adapted to the harsh agricultural environment of the Emirates.

Plant Protection and Quarantine Program in Peru

At the request of the A.I.D. mission in Peru, the Peruvian Association of Exporters (ADEX) and the Ministry of Agriculture of Peru (MAG), OICD, and APHIS have drafted a proposed 5-year Plant Protection and Quarantine Program. These institutions will cooperate in the program designed to improve the scope and effectiveness of phytosanitary systems necessary for exporting non-traditional agricultural products from Peru, and prevent the entry of foreign pests into Peru. To implement such a program OICD has drafted a three-party agreement among ADEX, MAG, and USDA/OICD which is currently under review.

This initiative follows one the recommendations made by the Andean Trade Initiative Inter-Agency Task Force, headed by Ambassador Edwin Corr, which strongly recommended the establishment of APHIS/PPQ resident positions in each of the Andean countries. Due to security considerations such a position cannot be established in Peru at present.

The proposed program will be implemented by short TDY assignments by APHIS personnel, an APHIS support foreign national staff, and MAG/Plant Health Service personnel.

Saudi Arabia -- Consumer Protection (CONPROT) Project

DRD is negotiating with the Saudi Ministry of Commerce to assist in improving the efficiency of the Ministry's commodity inspection and quality assurance program. This would be a reimbursable project under the United States-Saudi Arabian Joint Commission on Economic Cooperation. It is in USDA's interest to see that the Saudi consumer protection regulations are efficiently and consistently applied. A successful project, therefore, can help increase U.S. agricultural exports to the Kingdom.

Initiative for Southern Africa

OICD has entered into a new RSSA with A.I.D.'s Africa Bureau to assist in planning, implementing, and monitoring A.I.D.'s new Initiative for Southern Africa (ISA). OICD will provide both long- and short-term analysts and technical advisors to be members of a A.I.D. task force on the ISA. The task force will oversee and manage a process that will (1) assist in developing a strategy for the Initiative, (2) develop an operational framework for implementation, (3) facilitate dialogue within the southern Africa-U.S. public and private sector communities, and (4) coordinate A.I.D. and other U.S. government programs and activities, particularly with other sectors.

The initial A.I.D.-USDA agreement is for 1 year and covers the planning phase. It is anticipated that additional USDA assistance will be requested in the second phase of the activity.

Egypt National Agricultural Research Project

Fiscal 1994 is also the culminating year for Division coordination of technology transfer and national agricultural library components of the Egyptian National Agricultural Research Project (NARP). In cooperation with the U.S. National Agricultural Library, OICD is helping to establish the building and systems for a library that will serve all of Egypt and set standards for the entire region.

In technology transfer, Extension Service provided a short-term assignment of a senior extension administrator in Egypt. This is being followed by a visit by 15 senior Egyptian officials, to see

the Federal-State and extension-research-education partnerships that make U.S. extension work. USDA will now work with the project to help discuss and establish the right combination of elements to improve the Egyptian extension situation.

INTERNATIONAL ORGANIZATIONS/EXTERNAL AFFAIRS

During 1994, the International Organizations Division will pursue the following programmatic objectives:

- Work more closely with the Department of State and other federal agencies to expand and improve U.S. cooperation/ relations with international organizations, including developing and implementing mechanisms to enhance information-sharing about USDA and U.S. agricultural community programs and expertise;

- Collaborate with the Department of State and others to develop effective working relationships with the recently elected directors general of the FAO and IICA, and the new president of IFAD, and to foster changes in the organizations that could improve programs and operations;

- Expand collaboration with senior USDA officials and the technical agencies of international organizations in relation to the special programs and activities of international organizations concerned with food and agriculture;

- Strengthen policy input into the programs and projects of the multilateral development banks and seek expanded involvement of USDA agencies in bank-funded projects;

- Assign staff to monitor U.S. and international organizations' rapidly expanding efforts regarding the environment and follow-up to UNCED and other international conferences and convention, and coordinate/facilitate USDA interests in these;

- Strengthen and expand efforts to recruit and place qualified U.S. citizens in international organizations, particularly those associated with the historically black and with the Hispanic colleges and universities. Complete a formal agreement with IICA to facilitate the detailing of Americans to that organization;

- Increase liaison with other USDA agencies and appropriate universities and private sector organizations to strengthen FAO recruitment efforts and implementation of the Associate Professional Officers program with FAO and the International Fund for Agricultural Development; and

- Continue to take the lead to make the OICD/Agency International Contacts Group an effective mechanism for the coordination and strengthening of the international programs of the U.S. Department of Agriculture.

ADMINISTRATION

OICD Administration's goals for fiscal 1994:

- Integrate with FAS and the Farmer Services Agency administration with priority on telecommunication and continuing upgrade of ADP resources (such as personal computers, software, and LAN servers);

- Develop processes to ensure timely and responsive services. Continue to improve communication between administration and program staff;

- Develop procedures and processes to ensure work force diversity in reorganization and streamlining;

- Clear up backlog of administrative problems, such as negative cash, NFC interface, and administrative action tracking;

- Standardize procedures for managing advance of funds and third-party checks;

- Establish interim working groups to coordinate administrative activities, such as Administrative Directives and foreign travel procedures, between FAS and OICD; and

- Continue to explore the establishment of the Reinvention Lab for Travel Processing.

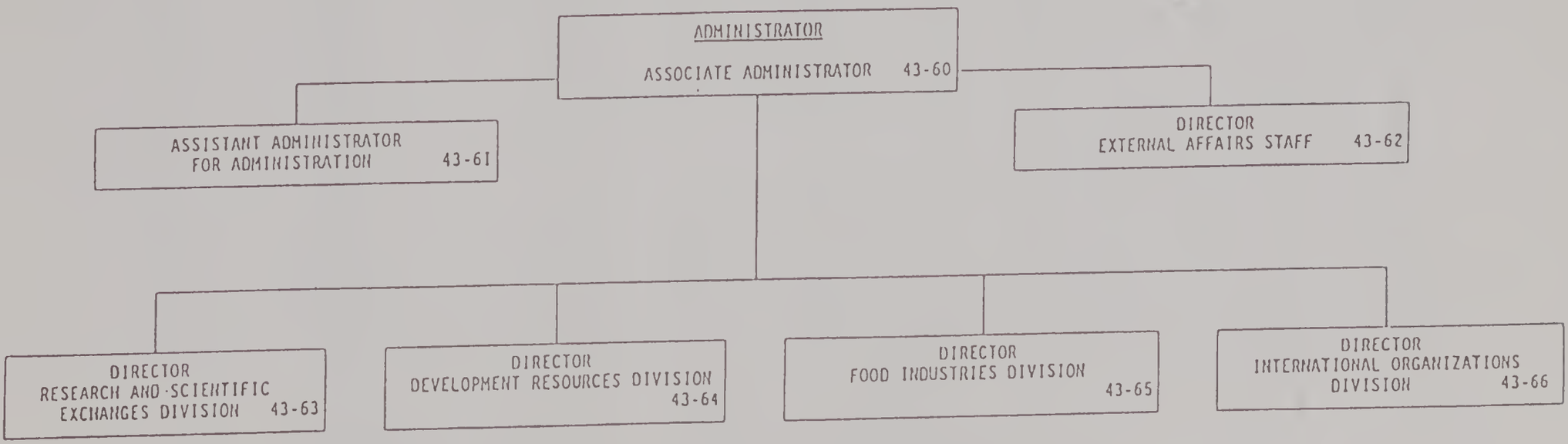
UNITED STATES DEPARTMENT OF AGRICULTURE
OFFICE OF INTERNATIONAL COOPERATION
AND DEVELOPMENT

RECOMMENDED: _____
ADMINISTRATOR, OICD

CONCURRED: _____
UNDER SECRETARY FOR INTERNATIONAL AFFAIRS AND COMMODITY PROGRAMS

APPROVED: _____
ASSISTANT SECRETARY FOR ADMINISTRATION

DATE: 8-30-90



MISSION OF OICD

"OICD's mission is to help the total U.S. Department of Agriculture, other Federal agencies, and associated institutions, industries, and organizations with global responsibilities serve worldwide human needs by strengthening food and agricultural systems in developing countries and, at the same time, strengthen U.S. Agriculture's international competitiveness and leadership through collaborative programs. Current programs include:

- Germplasm and scientific exchanges
- Collaborative research on mutual problems
- Linkages to international organizations
- Food industry, agribusiness, agriculture and natural resources development projects
- Fellowships and training for developing countries."

SUPERSEDES CHART DATED AUGUST 14, 1986

Appendix A

INTERNATIONAL COOPERATION AND DEVELOPMENT

Available Funds and Staff-Years

1993 Actual and Estimated, 1994 and 1995

	1993 Actual		1994 Estimated		1995 Estimated	
	Amount	Staff Years	Amount	Staff Years	Amount	Staff Years
Salaries and Expenses	$7,247,000	67	$6,962,000	67	$6,795,000	63
Obligations under other USDA appropriations:						
FAS, ERS, ES, and AMS for technical assistance and training in Eastern Europe and the former Soviet Union	4,183,630	6	4,200,000	6	4,200,000	6
ARS for Admin. of Internat'l Research	1,406,498	1	1,500,000	1	1,500,000	1
FS & AMS for development assistance in Latin America	223,645	--	250,000	--	250,000	--
Other Miscellaneous	100,000	--	100,000	--	100,000	--
Total, Agriculture Appropriations	13,160,773	74	13,012,000	74	12,845,000	70
Other Federal Funds:						
U.S.A.I.D. and others for development assistance	28,481,013	112	26,450,000	125	26,450,000	124
Non-Federal Funds:						
Contributions for USDA development assistance, from Spain, Saudi Arabia, international organizations, and universities	5,925,211	6	6,000,000	6	6,000,000	6
Total, Office of International Cooperation and Development	47,566,997	192	45,462,000	205	45,295,000	200

Appendix C

BUSINESS MISSIONS, WORKSHOPS AND CONSULTATIONS IN FY 93

REGION	COUNTRY	MISSIONS	WORKSHOPS	CONSULTATIONS
AFRICA	MOROCCO	0	0	1
	TUNISIA	0	0	1
TOTAL		0	0	2
ASIA	PHILIPPINES	0	1	0
CARIBBEAN	JAMAICA	0	1	1
CENTRAL AMER	BELIZE	1	0	0
	EL SALVADOR	0	0	1
TOTAL		1	0	1
SOUTH AMER	VENEZUELA	0	1	0
EUROPE	BULGARIA	0	1	0
	CZECH REPUBLIC	0	1	0
	HUNGARY	1	0	0
	POLAND	1	1	0
	SLOVAK REPUBLIC	0	1	0
TOTAL		2	4	0
NEAR EAST	EGYPT	0	0	1
	JORDAN	0	0	1
TOTAL		0	0	2
GRAND TOTAL		**3**	**7**	**7**

Appendix D

COCHRAN FELLOWSHIP PROGRAM
COMPLETED TRAINING
FY 1993

REGION	COUNTRY	# OF PARTICIPANTS
AFRICA	ALGERIA	6
	COTE D'IVOIRE	6
TOTAL 2		12
ASIA	CHINA	32
	HONG KONG	7
	KOREA, SOUTH	15
	MALAYSIA	14
	SINGAPORE	28
	TAIWAN	15
	THAILAND	15
	TURKEY	15
TOTAL 8		141
CARIBBEAN	BARBADOS	3
	TRINIDAD & TOBAGO	5
TOTAL 2		8
CENTRAL AMERICA	PANAMA 1	6
EUROPE	ALBANIA	7
	ARMENIA	10
	BELARUS	10
	BULGARIA	48
	CZECH REPUBLIC	36
	GEORGIA	9
	HUNGARY	28
	KAZAKHSTAN	12
	KYRGYZSTAN	13

	MOLDOVA	2
	POLAND	74
	RUSSIA	55
	SLOVAK REPUBLIC	14
	TAJIKISTAN	2
	TURKMENISTAN	13
	UKRAINE	11
	UZBEKISTAN	14
TOTAL	17	358
NORTH AMERICA	MEXICO 1	36
SOUTH AMERICA	COLOMBIA	7
	VENEZUELA	24
TOTAL	2	31
GRAND TOTAL	**33**	**592**

Appendix E

PROFESSIONAL DEVELOPMENT PROGRAM
PARTICIPANT ACTIVITY
FY 1993

ORGANIZATION	COUNTRY	COMPLETED ACADEMIC	COMPLETED NON-ACADEMIC
Food & Agriculture Organization (FAO)	ARGENTINA	0	1
	BRAZIL	0	2
	BURMA	2	0
	CHAD	1	0
	CHILE	0	2
	CHINA	0	47
	COSTA RICA	0	1
	ETHIOPIA	2	3
	GUATEMALA	0	1
	GUYANA	0	2
	HAITI	1	0
	INDIA	0	18
	INDONESIA	0	1
	JAMAICA	0	1
	JORDAN	1	0
	KENYA	3	0
	MALAWI	2	0
	MALAYSIA	0	2
	MEXICO	0	2
	NEPAL	1	0
	OMAN	1	0
	PERU	0	2
	PHILIPPINES	0	4
	SENEGAL	1	0

	SURINAME	0	1
	TANZANIA	0	2
	TRINIDAD & TOBAGO	0	2
	TURKEY	2	8
	UGANDA	0	1
	VENEZUELA	0	1
	YEMEN ARAB REP.	1	0
	ZAMBIA	2	0
TOTAL	32	20	104
FOREIGN COUNTRY FUNDS	BANGLADESH	0	2
	NIGERIA	0	3
	SAUDI ARABIA	0	2
	SPAIN	44	0
	VENEZUELA	1	0
TOTAL	5	45	7
OTHER USDA AGENCY APPROPRIATION	BULGARIA	0	34
	NICARAGUA	0	11
	POLAND	0	23
	RUSSIA	0	3
TOTAL	4	0	71
WORLD BANK	MALAYSIA 1	0	4
GRAND TOTAL	**42**	**65**	**186**

Appendix F

ONGOING COLLABORATIVE RESEARCH PROJECTS

FY 1993

REGION	COUNTRY	# OF PROJECTS
ASIA	CHINA	9
	INDIA	87
	JAPAN	1
	TAIWAN	21
	THAILAND	1
TOTAL	5	119
EUROPE	BULGARIA	2
	CZECH REPUBLIC	2
	FINLAND	1
	FRANCE	2
	GERMANY	4
	HUNGARY	23
	IRELAND	6
	ITALY	1
	NETHERLANDS	1
	POLAND	30
	ROMANIA	2
	SLOVAK REPUBLIC	2
	UNITED KINGDOM	1
	YUGOSLAVIA	19
TOTAL	14	96
NEAR EAST	EGYPT	30
	EGYPT/ISRAEL	1
TOTAL	2	31
NORTH AMERICA	MEXICO 1	7
PACIFIC	AUSTRALIA 1	1
SOUTH AMERICA	VENEZUELA 1	1
GRAND TOTAL	24	255

Appendix G

ONGOING FOREIGN CURRENCY/JOINT BOARD RESEARCH BY SUBJECT AND COUNTRY AND FUNDS FY 1993

SUBJECT	# OF PROJECTS
AGRICULTURAL ECONOMICS	1
AGRICULTURAL PRODUCTION	22
AQUACULTURE/FISHERY	8
BIOTECHNOLOGY	7
FORESTRY/WOOD PRODUCTS	8
GERMPLASM/GENETICS	9
GLOBAL ENVIRONMENT	1
HUMAN NUTRITION	7
PEST/DISEASE PREVENTION	58
POSTHARVEST TECHNOLOGY	7
SOIL/WATER RESOURCES	15
SUSTAINABLE AGRICULTURE	32
TOTAL	**175**

REGION	COUNTRY	# OF PROJECTS	FUNDS ($000)
ASIA	INDIA	84	7,481
	TAIWAN	21	3,428
TOTAL		105	10,909
EUROPE	CZECH REPUBLIC	1	58
	HUNGARY	19	798
	POLAND	29	2,518
	SLOVAK REPUBLIC	2	55
	YUGOSLAVIA	19	1,505
TOTAL		70	4,934
GRAND TOTAL		**175**	**15,843**

Appendix H

U.S. SCIENTIFIC EXCHANGE TEAM VISITS

FY 1993

REGION	COUNTRY	NUMBER OF EXCHANGES	NUMBER OF PARTICIPANTS
AFRICA	COTE D'IVOIRE 1	1	1
ASIA	CHINA	20	52
	JAPAN	3	3
	KOREA, SOUTH	1	1
	THAILAND	2	2
TOTAL	4	26	58
EUROPE	BELGIUM	1	1
	BULGARIA	4	3
	CZECH REPUBLIC	2	6
	DENMARK	1	2
	FRANCE	4	4
	GERMANY	4	12
	HUNGARY	3	7
	IRELAND	10	15
	ITALY	3	8
	LATVIA	1	3
	LITHUANIA	1	1
	NETHERLANDS	3	4
	NORWAY	1	2
	POLAND	2	2
	ROMANIA	1	4
	RUSSIA	3	5
	UKRAINE	1	1
TOTAL	17	45	80
NEAR EAST	ISRAEL 1	1	3
NORTH AMER	MEXICO 1	6	7
PACIFIC	AUSTRALIA	6	13
	NEW ZEALAND	4	13
TOTAL	2	10	26
SOUTH AMER	ARGENTINA	1	1
	BRAZIL	5	8
	CHILE	1	1
	URUGUAY	1	1
	VENEZUELA	2	4
TOTAL	5	10	15
GRAND TOTAL	**31**	**99**	**190**

Appendix I

TECHNICAL ASSISTANCE ACTIVITY
FY 1993

SUBJECT	REGION					
	AFRICA	ASIA/PAC	LATIN AMER.	MIDDLE EAST	EUROPE/NIS	TOTALS
AGRICULTURAL ECONOMICS	35	3	2	0	10	**50**
AGRICULTURAL PRODUCTION	0	0	2	0	0	**2**
AQUACULTURE/FISHERY	9	0	0	0	0	**9**
BIOTECHNOLOGY	1	0	8	0	0	**9**
FORESTRY/WOOD PRODUCTS	21	9	31	0	7	**68**
GERMPLASM/GENETICS	0	0	1	0	0	**1**
GLOBAL ENVIRONMENT	11	8	14	1	9	**43**
HUMAN NUTRITION	0	0	12	0	1	**13**
HUMAN RESOURCES DEVELOPMENT	27	2	37	2	15	**83**
INSTITUTION BUILDING	1	5	5	7	0	**18**
NEW TECHNOLOGY/COMPUTERS	6	0	10	0	0	**16**
PEST/DISEASE PREVENTION	32	26	8	0	1	**67**
PROGRAM/PROJECT MANAGEMENT	8	6	22	0	5	**41**
SOIL/WATER RESOURCES	10	17	5	2	3	**37**
SUSTAINABLE AGRICULTURE	21	0	1	0	1	**23**
TRADE AND INVESTMENT	1	0	24	0	14	**39**
TOTALS	**183**	**76**	**182**	**12**	**66**	**519**

Appendix J

INTERNATIONAL PARTICIPANTS ATTENDING USDA TRAINING COURSES IN THE UNITED STATES IN FY 1993

REGIONS	COUNTRY	PARTICIPANTS
AFRICA	ALGERIA	1
	BOTSWANA	1
	COTE D'IVOIRE	1
	GHANA	1
	GUINEA-BISSAU	1
	KENYA	1
	MALAWI	10
	MALI	2
	MOROCCO	4
	MOZAMBIQUE	1
	NIGERIA	73
	SENEGAL	1
	SUDAN	4
	TANZANIA	6
	UGANDA	6
	ZAMBIA	3
	ZIMBABWE	4
TOTAL	17	120
ASIA	CHINA	4
	HONG KONG	1
	INDIA	3
	KOREA, SOUTH	2
	MALAYSIA	1
	MYANMAR	6
	NEPAL	2
	PAKISTAN	32
	PHILIPPINES	8
	SRI LANKA	5
	THAILAND	3
	TURKEY	3
TOTAL	12	70
CARIBBEAN	BARBADOS	2
	JAMAICA	2
	ST. LUCIA	1
	TRINIDAD & TOBAGO	1
TOTAL	4	6
CENTRAL AMERICA	COSTA RICA	1
	EL SALVADOR	4
	PANAMA	1
TOTAL	3	6
EUROPE	CZECH REPUBLIC 1	1
NEAR EAST	EGYPT	18
	UNITED ARAB EMIRATES	1
TOTAL	2	19
PACIFIC	FIJI 1	1

SOUTH AMERICA	BOLIVIA	1
	BRAZIL	1
	GUYANA	1
	VENEZUELA	1
TOTAL	4	4
TOTALS	**40**	**227**

*U.S. GOVERNMENT PRINTING OFFICE: 1994-300-158/00019